

Cancer Screening

Guideline: Each person should have periodic health examinations that include evaluation for the risk for cancer and examinations to detect signs of premalignant and malignant condition.

The following Guideline is intended to help physicians, nurses, and others involved in clinical decision-making by describing the recommended course of action for Cancer Screening for individuals served by SCDDSN. As much as possible, the recommendations reflect the strength of evidence and magnitude of net benefit (benefits minus harms) as reported by the U.S. Preventive Services Task Force, the National Cancer Institute, and other nationally recognized health organizations. Decisions about screening for each individual should be based on clinical history, assessment, and other factors unique to the individual. When, because of behavioral or physical conditions, it would be necessary to use conscious sedation or general anesthesia to complete screening procedures, screenings should be completed at the discretion of the primary care prescriber after a risk/benefit analysis has been completed.

DEFINITIONS:

Cancer screening: The process of assessing people for early signs of a certain type cancer even though they have no symptoms.¹

Individual's record: A permanent legal document that provides comprehensive information about the individual's health care status.

Medical progress notes: The section of the individual's record where primary care prescribers document their findings and provide rationale for treatment plans.

Primary care prescribers: Physicians, nurse practitioners, and physician's assistants who provide primary care services and are authorized to prescribe medications and treatments for people on their assigned caseloads.

Risk factor: Anything that increases a person's chance of getting a disease such as cancer. Even if a person has one or more risk factors for a specific type of cancer, it is impossible to know for sure how much that risk factor contributed to causing the cancer.

RATIONALE:

1. The purpose of cancer screening is to identify persons at high risk for specific conditions and to provide early detection and intervention for asymptomatic persons.
2. Treatment for cancer is most successful when detected and treated early. Screening may reduce cancer mortality and morbidity since treatment for earlier-stage cancers is often less aggressive than that for more advanced cancers.
3. The following guidelines have been adapted from the current recommendations of the U.S. Preventative Services Task Force, the National Cancer Institute, and other health organizations.

EXPECTED OUTCOMES (General):

1. Staff should be trained to observe for signs or symptoms of cancer. These may include:
 - Change in bowel or bladder habits
 - A sore that does not heal
 - Unusual bleeding or discharge
 - Thickening or lump in the breast or elsewhere
 - Indigestion or difficulty swallowing
 - Obvious change in wart or mole
 - Nagging cough or hoarseness
2. Training should be incorporated into new employee orientation programs for all employees. Documentation of training should be maintained according to facility policy.

3. Changes in a person's appearance, activity-level, or behavior which may suggest any early signs or symptoms of cancer should be reported promptly to health personnel. The nurse should document reported information and observations in the nursing notes.
4. Prompt and thorough follow-up should be completed and documented when signs and/or symptoms of cancer are detected.
 - a. The medical plan of care should be documented in the medical progress notes.
 - b. Nursing strategies, interventions, and follow-up should be documented in the nursing notes.

BREAST CANCER

Health examinations for early detection of breast cancer should be conducted at least annually as part of the physical examination by the primary care prescriber.

1. A breast exam should be performed by a trained nurse or primary care prescriber in conjunction with the quarterly physical assessment. For women who do not receive quarterly assessments, the exam should be completed on a quarterly basis. Results of the exam should be documented in the individual's record.
2. Mammograms should be obtained every 1 to 2 years for women 40 years of age and over.² When mammograms cannot be obtained, the reason should be indicated in the medical progress notes. Women should be referred to a breast clinic or gynecologist for consultation as needed.
3. If a lump or thickening of the breast is identified or if bleeding or discharge from the nipple is detected, it should be documented in the nursing notes and the woman should be referred to the primary care prescriber immediately.

CERVICAL CANCER

Health examinations for early detection of cervical cancer should be conducted on a regular basis for women who have been sexually active and have a cervix.³

1. Examination Schedule:
 - a. A pap test should be obtained at least every three years for women between the ages of 21 and 64 years who have been sexually active and have a cervix. For women who have been sexually active at a young age, the screening cycle should begin within three years of first sexual activity.
 - b. Regular Pap tests may be discontinued after age 65 for women who have had consistently normal results on previous tests and are not otherwise at increased risk for cervical cancer.
 - c. Routine Pap tests are not recommended for women who have had a total hysterectomy for benign disease.
2. The need for a Pap test following hysterectomy depends on the reason for the surgery and the type of procedure done.
 - a. If the hysterectomy was a treatment for cancer, regular Pap tests should continue.
 - b. If the cervix was not removed (partial hysterectomy), Pap test is still needed.
3. Women may need considerable preparation for the examination. If the procedure is difficult to complete due to behavioral or physical reasons, conscious sedation or general anesthesia may be considered. Unless the woman is considered high risk for cervical cancer, a Pap test with the use of conscious sedation or general anesthesia should be withheld until other invasive testing or procedures are being done.

COLORECTAL CANCER

Health examinations for early detection of colorectal cancer should be conducted on a regular basis for men and women aged 50 years and older.⁴

1. Screening should consist of a fecal occult blood test (FOBT) annually. At the discretion of the physician, a sigmoidoscopy may be completed every 5 years or colonoscopy may be completed every 10 years.
2. The choice of screening strategy should be based on patient preferences, medical contraindications, patient adherence, and resources for testing and followup.⁵ Results of the examination should be documented as part of the annual physical examination.
3. Neither a digital rectal examination (DRE) nor the testing of a single stool specimen obtained during DRE is recommended as an adequate screening strategy for colorectal cancer.⁵
4. Individuals should begin colorectal cancer screening earlier and be screened more frequently if they have any of the following risk factors:⁶
 - a. a personal history of colorectal cancer or adenomatous polyps,
 - b. a strong family history of colorectal cancer or adenomatous polyps,
 - c. a personal history of chronic inflammatory bowel disease.
 - d. A family history of a hereditary colorectal cancer syndrome
5. Any rectal bleeding or long-term change in bowel habits should be documented in the nursing notes and reported to the primary care prescriber immediately.

PROSTATE CANCER

Health examinations for early detection of prostate cancer may be considered although the effectiveness of screening procedures to detect cancer has not been substantiated.⁷

1. Annual digital rectal examination (DRE) and Prostate-Specific Antigen (PSA) may be considered for men 50 years of age and older who have at least a 10 year life expectancy.
2. Younger men in high risk groups (African-Americans and those with strong familial predisposition) may be started at a younger age.
3. Results of the examination will be documented as part of the annual physical examination.

SKIN CANCER

Health examinations using a total-body skin examination for early detection of skin cancer should be conducted at least annually at the time of the annual physical examination.

1. Excessive sun exposure should be avoided and use of protective clothing and sunscreen are encouraged.⁸
2. Clinical considerations for selected populations at high risk: ⁸
 - a. The following people are at substantially increased risk for melanoma:
 - fair-skinned men and women aged >65,
 - patients with atypical moles, and
 - those with >50 moles
 - b. Clinicians should remain alert for skin lesions with malignant features noted in the context of physical examinations performed for other purposes.
 - c. The following conditions of the skin should be documented and reported to the primary care prescriber for follow-up examination and the results of the follow-up examination should be documented in the medical progress notes: ⁹
 - A sore that does not heal
 - A new growth
 - Spread of pigment from the border of a spot to surrounding skin

- Redness or a new swelling beyond the border
 - Change in sensation – itchiness, tenderness, or pain
 - Change in the surface of a mole – scaliness, oozing, bleeding, or the appearance of a bump or nodule.
- d. Asymmetry, border irregularity, color variability, diameter >6 mm (ABCD Rule), or rapidly changing lesions are features associated with an increased risk of malignancy. Suspicious lesions should be biopsied.¹⁰

ABCD Rule for Early Detection of Melanoma

Warning Signal	Definition
A = Asymmetry	One half of the mole does not match the other half
B = Border irregularity	The edges look ragged, notched, or blurred
C = Color	The pigment is not uniform
D = Diameter	A diameter greater than 6 mm or any sudden or progressive increase in size should be of concern.

TESTICULAR CANCER

Health examinations for early detection of testicular cancer should be conducted according to the following guidelines:

1. All males should have a testicular examination as part of their annual physical examination. Results should be documented as part of the annual physical.
2. Testicular examination should be done by the nurse or the primary care prescriber in conjunction with a quarterly physical assessment up to the age of 40. For those men who do not receive a quarterly assessment, the exam should be done on a quarterly basis or at the same time as other medical examinations with the primary care prescriber. Results of these exams should be documented in the individual's record.
3. Any lump on the testicle or change in its size should be documented and reported to the primary care prescriber for follow-up examination. Results of the follow-up examination and treatment rendered should be documented in the medical progress notes.

There are no recommendations for screening beyond the routine annual physical examination for the following types of cancer previously addressed in the Health Care Guidelines:

- ENDOMETRIAL CANCER¹¹
- LUNG CANCER¹²
- ORAL CANCER¹³
- THROAT CANCER
- URINARY TRACT and BLADDER CANCER¹⁴

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Risk Factors for Cancer

The following information is adapted from information disseminated by the American Cancer Society and available on their Web Site (<http://www.cancer.org>). Dates for the most recent revisions from the American Cancer Society are noted in parentheses.

Breast Cancer (revised 12-04)

Risk factors that cannot be changed include:

- Gender – Breast cancer is 100 times more common in women than men.
- Aging – The risk increases with age. About 77% of women with breast cancer are over 50.
- Genetics – Between 5 and 10% of all cases are hereditary as a result of gene changes.
- Family history
- Personal history of breast cancer
- Race – White women are slightly more likely than African Americans to develop breast cancer.
- Menstrual periods – Women who start menstruating before age 12 or who go through menopause after 55 have a slightly higher risk of breast cancer.
- Previous abnormal breast biopsies. (Note: biopsy specimens diagnosed as “fibrocystic changes without proliferative breast disease” and “fibroadenoma” does not increase breast cancer risk.)
- Previous radiation therapy to the chest

Risk factors related to life-style include:

- Not having children or having the first child after age 30 slightly increases risk of breast cancer
- Hormone replacement therapy for several years after menopause
- Use of alcohol
- Obesity and high fat diets

Cervical Cancer (revised 11-03)

The following increase the risk of women having cervical cancer:

- Having had human papilloma/virus (HPV)
- Smoking
- HIV infection
- Past or current chlamydia infection
- Poor diets (low in fruits and vegetables)
- Overweight
- Long term use of oral contraceptives
- Multiple pregnancies
- Family history

Colorectal Cancer (revised 5-04)

The following increase the risk of a person having colorectal cancer:

- Family History
- Ethnicity – Ashkenazi Jews have higher rate of colon cancer
- Personal history of colorectal cancer
- Personal history of polyps
- Personal history of bowel disease (Ulcerative colitis, Crohn’s Disease)
- Age – over 50
- High fat diet
- Lack of exercise – physical inactivity
- Overweight
- Smoking
- Heavy alcohol use

Endometrial Cancer (revised 5-04)

The following increase the risk of women having endometrial cancer

- Early menarche – periods starting before age 12
- Late onset of menopause – after age 50
- History of infertility or failure to ovulate
- No history of pregnancy
- Estrogen-related exposures including estrogen replacement therapy and tamoxifen
- Obesity
- Use of tamoxifen (must be balanced with positive impact on breast cancer)
- Estrogen replacement therapy (ERT)
- Ovarian diseases
- Diet high in animal fat
- Diabetes
- Age – 95% occurs in women over 40
- Family history
- Breast or ovarian cancer
- Earlier pelvic radiation therapy

Lung Cancer (revised 4-04)

The following increase the risk of a person having lung cancer:

- Smoking and second hand smoke
- Exposure to industrial substances such as: arsenic, some organic chemicals, radon, and asbestos
- Radiation exposure from occupational, medical, and environmental sources
- Tuberculosis and other lung diseases
- Personal and family history
- Diet low in fruits and vegetables
- Gender – women may be more susceptible
- Air pollution

Oral Cavity and Oropharyngeal Cancer (revised 4-04)

The following people are at the highest risk for cancer of the oral cavity or oropharyngeal cancer:

- People who smoke cigarettes, cigars, or pipes or use smokeless tobacco
- Heavy users of alcohol
- Exposure to ultraviolet light (for cancer of the lip)
- Irritation to lining of the mouth from poorly fitting dentures
- Diet low in fruits and vegetables
- Gender – Men have higher incidence than women
- Age – Incidence increases with age, especially after age 35

Prostate Cancer (revised 8-04)

The following people are at higher risk of having prostate cancer:

- Men over 65.
- African Americans
- Family history
- Diet high in red meats and high fat dairy products and low in fruits and vegetables

Skin Cancer

People with the following characteristics are at higher risk for developing melanoma (revised 6-03):

- Multiple and large moles

- Fair skin
- Family history
- History of treatment with medicines to suppress immune system
- Excessive exposure to ultraviolet radiation
- Prior history of melanoma.
- Men
- Over 50 years of age (50% occurs after age 50)

People with the following characteristics are at higher risk for non-melanoma skin cancer (revised 4-04):

- Too much exposure to ultraviolet light
- Fair skin
- Men
- Exposure to large amounts of arsenic
- Previous exposure to radiation treatment
- Personal history of certain skin diseases
- Personal history of weakened immune systems

Testicular Cancer (revised 4-04)

The following men are at higher risk of having testicular cancer:

- Younger men ages 15-40
- Family history
- Certain types of moles on back, chest, belly, and face
- HIV infection
- History of cryptorchidism (undescended testicles)
- Prior history of testicular cancer
- Caucasians

Throat Cancer (Reference article 9/20/01)

The following people are at high risk for throat cancer:

- Men and women who are heavy smokers
- Those who consume large amounts of alcohol in conjunction with smoking are at even higher risk.

Bladder Cancer (revised 10-04)

The following people are at increased risk of having bladder cancer:

- Smokers
- Caucasians
- Men age 50 or over
- Those with a history of chronic bladder inflammation (urinary tract infections, kidney and bladder stones, and other causes of chronic bladder irritation)
- Personal history of bladder cancer
- Birth defects involving the bladder
- Personal history of exposure to radiation treatment
- Arsenic in drinking water

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